Insurance Coverage of Unintended Pregnancies Resulting in Live-Born Infants — Florida, Georgia, Oklahoma, and South Carolina, 1996

In the United States during 1994, approximately 49% of all pregnancies, excluding miscarriages, were unintended (*1*). Unintended pregnancy can result in adverse health outcomes that affect the mother, infant, and family (*2*). Little is known about the distribution of unintended pregnancy with respect to the payment source for health care. In the absence of data for periconceptional payment source for health care, prenatal-care payment source is used as a surrogate. To develop recommendations to reduce unintended pregnancy, CDC analyzed insurance coverage-specific

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prevalences of live-born infants from unintended pregnancies among women aged 20–34 years using data from the Pregnancy Risk Assessment and Monitoring System (PRAMS) for 1996 (the most recent year for which data are available). This report summarizes the results of this analysis, which indicates that the highest rates of unintended pregnancy occurred among women covered by Medicaid, with lower rates among women covered by health-maintenance organizations (HMOs) or private insurance.

PRAMS is an ongoing, state-based surveillance system that surveys a sample of new mothers and ascertains pregnancy intendedness and pregnancy-related behaviors, experiences, payment sources for prenatal care, and outcomes. Each month, 18 participating states survey 100–250 new mothers by using stratified, systematic sampling of resident birth certificates. A questionnaire is mailed to each mother 2–6 months postpartum, and a second questionnaire is mailed to nonrespondents. Nonrespondents are then contacted by telephone. This report uses data from Florida, Georgia, Oklahoma, and South Carolina, where questionnaires ascertained information about public and private payment sources for prenatal care, including managed-care organizations and HMOs. The response rate for the states included in this analysis was ≥70%.

Intended pregnancies were pregnancies for which a woman wanted to be pregnant when she conceived or sooner; unintended pregnancies were pregnancies for which the woman either did not want to be pregnant or desired to be pregnant later. Mothers were asked to identify payment sources for prenatal care. Responses were categorized hierarchically as Medicaid, HMO, private commercial insurance (PCI), or other sources, which included the Indian Health Service or military coverage. When sample sizes were too small to disaggregate, HMO and PCI were combined. Analysis was stratified by race and marital status because of differences in the rate of unintended pregnancy by these variables.

Because of small sample sizes, additional variables were not stratified. SUDAAN was used to account for the sample design in estimating prevalence percentages and standard errors (*3*). Data were weighted to adjust for survey design and nonresponse. Differences in proportions were assessed by examining the 95% confidence intervals (CIs); the proportions were considered to be different from each other if the associated 95% CIs did not overlap. The 5419 mothers in the analysis represented 276,763 women in the four states having live-born infants.

In 1996, most of the women who delivered live-born infants were white (range: 68.0%–90.0%). Among white women, 76.6%–88.1% were married, and 11.9%–23.4% were unmarried; among black women, 38.5%–41.7% were married, and 58.3%–61.5% were unmarried. The main payment source for prenatal care for married white women was PCI (44.9%–55.2%), followed by Medicaid (21.2%–28.4%), HMO (8.1%–17.7%), and other sources (9.0%–17.6%). For unmarried white women, Medicaid was the main source (68.3%–85.4%), followed by PCI (7.5%–27.4%) and other sources (4.1%–7.2%). For married black women, the payment sources were PCI (38.7%–68.4%), Medicaid (19.8%–51.2%), and other sources (9.7%–11.8%). For unmarried black women, payment sources were Medicaid (71.9%–88.3%), PCI (10.3%–19.7%), and other sources (1.4%–8.4%).

The prevalence of unintended pregnancies resulting in live-born infants varied by maternal race and marital status (Table 1). Overall, the prevalence of unintended preg-

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TABLE 1. Percentage* of live-born infants from unintended pregnancies among women aged 20–34 years, by race† and marital status§ — Florida, Georgia, Oklahoma, and South Carolina, Pregnancy Risk Assessment and Monitoring System, 1996

Race/ Marital status	Florida (n=1388)		Georgia (n=1202)		Oklahoma (n=1343)		South Carolina (n=1486)	
	%	(SE¶)	%	(SE)	%	(SE)	%	(SE)
White (n=3587)								
Married	32.1	(±2.3)	28.0	(±2.6)	36.6	(± 2.6)	29.7	(±2.2)
Unmarried	55.4	(±5.1)	55.6	(±8.7)	63.7	(± 5.7)	66.3	(±5.5)
Total	**37.3**	**(±2.2)**	**31.1**	**(±2.5)**	**41.7**	**(± 2.4)**	**35.4**	**(±2.1)**
Black (n=1805)								
Married	48.4	(±4.8)	49.5	(±3.9)	43.0	(±11.8)	59.6	(±5.5)
Unmarried	75.0	(±3.2)	74.0	(±3.0)	72.8	(± 9.6)	79.7	(±3.5)
Total	**65.0**	**(±2.8)**	**63.4**	**(±2.5)**	**59.9**	**(± 7.8)**	**71.8**	**(±3.1)**

*Percentages weighted to account for survey design and nonresponse.
†Numbers for races other than white and black were too small for meaningful analysis.
§Marital status for 27 women was unknown.
¶Standard error.

nancy was higher among black women (59.9%–71.8%) than among white women (31.1%–41.7%). Among unmarried white women, the state-specific prevalences were significantly higher (55.4%–66.3%) than among married white women (28.0%–36.6%). Similarly, percentages were significantly higher among unmarried black women (72.8%–79.7%) than among married black women (43.0%–59.6%) except in Oklahoma.

Overall, the prevalence of unintended pregnancy by payment source varied by state. For women whose prenatal care was paid by Medicaid, the state-specific percentages for unintended pregnancies ranged from 58.9 % to 65.3%; for HMO enrollees, from 23.5% to 29.0%; for PCI enrollees, from 25.2% to 36.0%; and for other sources, from 35.8% to 42.7%. For married white women whose prenatal care was paid by Medicaid, the state-specific percentages for unintended pregnancies ranged from 43.8% to 53.5%; for HMO enrollees, from 23.5% to 29.0%; and for PCI enrollees, from 20.0% to 30.9%. High prevalences of unintended pregnancy resulting in live-born infants were observed for all sources among unmarried white women (Table 2).

The state-specific prevalences of unintended pregnancies resulting in live-born infants among married black women were highest for those whose prenatal care was paid by Medicaid (61.1%–87.7%), by PCI/HMO (28.9%–43.7%), and by other sources (55.0%–70.0%) (Table 2). The prevalences among unmarried black women were highest for those whose prenatal care was covered by Medicaid (68.2%–80.1%), PCI/HMO, and other sources (Table 2).

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Editorial Note: The prevalence of unintended pregnancy among women delivering live-born infants was higher among unmarried women, black women, and women whose prenatal care was paid by Medicaid. These findings may reflect differences in education, socioeconomic status, cultural factors, and access to family-planning and health-care services across populations of women in these states. The findings of this

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TABLE 2. Percentage of live-born infants from unintended pregnancies among women aged 20–34 years, by race,* marital status,† and prenatal care (PNC) payment source§ — Florida, Georgia, Oklahoma, and South Carolina, Pregnancy Risk Assessment and Monitoring System, 1996

Race/ Marital status/ payment source	Florida (n=1388)		Georgia (n=1202)		Oklahoma (n=1343)		South Carolina (n=1486)	
	%	(SE¶)	%	(SE)	%	(SE)	%	(SE)
White (n=3587)								
Married (n=2887)								
Medicaid	46.3	(± 5.4)	43.8	(± 6.0)	53.5	(± 5.9)	48.0	(± 4.7)
HMO	29.0	(± 6.8)	23.5	(± 8.7)	23.9	(± 6.2)	24.8	(± 4.8)
PCI	26.6	(± 2.9)	20.0	(± 3.0)	30.9	(± 3.6)	20.4	(± 2.8)
Other	34.6	(± 7.1)	32.9	(± 8.3)	39.1	(± 6.4)	32.4	(± 7.3)
Unmarried (n=649)								
Medicaid	59.2	(± 5.9)	54.5	(± 9.7)	62.1	(± 7.1)	65.3	(± 6.4)
PCI/HMO	61.0	(±11.2)	66.2	(±27.0)**	69.8	(±10.3)	76.1	(±10.3)
Other	5.5	(± 3.2)**	34.3	(±28.6)**	53.6	(±25.0)	60.4	(±28.3)**
Black (n=1805)								
Married (n=707)								
Medicaid	68.9	(± 8.6)	61.1	(± 6.2)	87.7	(± 8.5)**	71.0	(± 6.8)
PCI/HMO	35.3	(± 5.9)	37.4	(± 5.4)	28.9	(±11.9)	43.7	(± 8.9)
Other	55.0	(±15.2)	63.9	(±11.5)	70.0	(±20.1)**	61.2	(±20.1)**
Unmarried (n=1069)								
Medicaid	75.9	(± 3.9)	76.4	(± 3.2)	68.2	(±11.3)	80.1	(± 3.6)
PCI/HMO	78.0	(± 6.3)	57.1	(±10.0)	95.9	(± 2.3)**	71.9	(±13.1)
Other	59.3	(±12.3)	74.7	(±12.4)	69.8	(±22.3)**	71.3	(±14.2)**

*Numbers for races other than white and black were too small for meaningful analysis.
†Marital status for 27 women was unknown, and for 80 other women source of payment could not be ascertained.
§Because of small sample sizes, health- maintenance organizations (HMOs) and private commercial insurance (PCI) were combined for unmarried white women and for black women.
¶Standard error.
**Sample size ≤20.

analysis emphasize the need for providing timely and appropriate family-planning services to women in both public and private settings.

Many women with Medicaid coverage during pregnancy lacked comprehensive health-care coverage before pregnancy and became eligible for Medicaid by being pregnant. In the absence of comprehensive health-care coverage, low-income women are eligible for Title X services, which provide free or low-cost family-planning services. Use of family-planning services is influenced by behavioral, financial, and structural barriers (*1,2,4*).

This report is subject to at least four limitations. First, the findings are from a few selected states and are not representative of the entire United States. The findings are most generalizable to women having live-born infants in the four states included in this report. However, the prevalence of unintended pregnancy resulting in live-born infants among women whose prenatal care was paid for by HMOs, PCI, or other sources was similar to that (25%) in one study of well-educated women enrolled in

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selected HMOs (*5*). Second, data to assess prevalence of unintended pregnancies resulting in abortions or miscarriages were not available, and because nearly all abortions result from unintended pregnancies, the findings are applicable only to women who gave birth to live-born infants. Third, payment source and intendedness of pregnancy may be misclassified because of problems in recall or changes in insurance coverage that may occur during pregnancy. Finally, source of payment for prenatal care may incompletely reflect source of payment for health care before pregnancy.

To reduce the adverse consequences of unintended pregnancies and to maximize the benefits of periconceptional interventions (e.g., use of folic acid and cessation of alcohol consumption), health-care providers and communities need to collaborate in promoting a social norm in which all pregnancies are planned (*2*). Findings from this and other reports suggest that access to health care and timely family-planning services to women in all settings is needed to avoid the medical, social, and economic costs of unintended pregnancy.

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